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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,509	03/25/2004	Koji Ishii	040155	5520

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EXAMINER	
MAKIYA, DAVID J	
ART UNIT	**PAPER NUMBER**
2885	

MAIL DATE	DELIVERY MODE
11/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/808,509	ISHII ET AL.	
	Examiner	Art Unit	
	David J. Makiya	2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for use of a substrate, first electrode, electroluminescent material and second electrode, does not reasonably provide enablement for an emitting layer printed directly on the first electrode, and a second electrode formed directly on the emitting layer without the use of an insulating or dielectric layer as argued. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The Tang et al. (US Patent 4,769,292) reference teaches "eventually a voltage level is required that cannot be conveniently supplied by the EL device driving circuitry or which produces a field gradient (volts/cm) exceeding the dielectric breakdown strength of the layers separating the electrodes, resulting in a catastrophic failure of the EL device" (Tang et al.; Column 3, Line 65–Column 4, Line 2) so "the organic luminescent medium performs is to provide a dielectric barrier to prevent shorting of the electrodes on electrical biasing of the EL device" (Tang et al.; Column 39, Lines 50-68). Hay et al. (US Patent 5,697,322) teaches that "A thick-film EL lamp is essentially a capacitor having a dielectric layer between two conductive electrodes, one of which is transparent" (Column 1, Lines 35-47). Krafcik et al. (US Patent 6,465,951) teaches "Portions of conductive traces 36 that are not connection points to conductive pads 41a of lamps 40 are

generally covered with a dielectric layer to provide electrical isolation, reduce silver migration, and to provide moisture protection" (Column 5, Lines 35-57). Since the applicant does not address the use or removal of an insulating or dielectric layer in the original specification, the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention could functionally operate. Claims will be interpreted as best understood.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US Patent 4,769,292) in view of Krafcik et al. (US Patent 6,465,951).

With respect to claim 1, Tang et al. teaches a dial plate for use in an instrument panel of a vehicle, having a segment display area including indexes, consisting of laminated patterns of light emitting elements (114, 116), the laminated patterns being formed on a substrate (Figure 1), composed of a glass or a resin (Column 39, Lines 44-50), by laminating electroluminescent materials through printing (Column 39, Lines 25-43), a first electrode 102 printed directly on the substrate, an emitting layer 106 printed directly on the first electrode, and a second electrode 104 formed directly on the emitting layer (Figure 1), and having a specific design corresponding to external data (Column 39, Lines 44-50). However, Tang et al. fails to teach the device being a

dial plate for use in an instrument panel. Krafcik et al. teaches a dial plate for use in an instrument panel of a vehicle, having a segment display area including indexes (84a-87a and 89a-94a), comprising a substrate 40, laminating electroluminescent materials 46 through printing, a first electrode 44 printed directly on the substrate, and a second electrode 50, and having a specific design corresponding to external data (Figure 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the use of the device of Tang et al. to include being a dial plate for use in an instrument panel from the teachings of Krafcik et al. because "providing lamps for control panels such as the instrumentation mount 82 described above in conjunction with FIG. 7, the flexible substrate manufacturing approach is highly desirable, for being less expensive than forming rigid members" (Krafcik et al.; Column 9, Lines 30-57).

With respect to claim 3, Tang et al. teaches a method for producing a dial plate for use in an instrument panel of a vehicle, having a segment display area including indexes, comprising the steps of receiving external data (Column 39, Lines 44-50); and forming laminated patterns (Figure 1) on a substrate (Column 39, Lines 44-50) by laminating electroluminescent materials (114, 116) through printing (Column 39, Lines 25-43), by printing a first electrode 102 directly on the substrate, an emitting layer 106 directly on the first electrode, and a second electrode 104 directly on the emitting layer (Figure 1), whereby the laminated patterns have a specific design corresponding to the external data (Column 39, Lines 44-50). However, Tang et al. fails to teach the method being for a dial plate for use in an instrument panel. Krafcik et al. teaches a method for producing a dial plate for use in an instrument panel of a vehicle, having a segment display area including indexes (84a-87a and 89a-94a), comprising a substrate 40, laminating

electroluminescent materials 46 through printing, a first electrode 44 printed directly on the substrate, and a second electrode 50, and having a specific design corresponding to external data (Figure 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the use of the method of Tang et al. to include being a dial plate for use in an instrument panel from the teachings of Krafcik et al. because "providing lamps for control panels such as the instrumentation mount 82 described above in conjunction with FIG. 7, the flexible substrate manufacturing approach is highly desirable, for being less expensive than forming rigid members" (Krafcik et al.; Column 9, Lines 57).

Response to Arguments

Applicant's arguments with respect to claims 1 and 3 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's arguments, the applicant alleges that the claimed device does not include an insulating or dielectric layer. However, the Tang et al. reference teaches "eventually a voltage level is required that cannot be conveniently supplied by the EL device driving circuitry or which produces a field gradient (volts/cm) exceeding the dielectric breakdown strength of the layers separating the electrodes, resulting in a catastrophic failure of the EL device" (Tang et al.; Column 3, Line 65–Column 4, Line 2) so "the organic luminescent medium performs is to provide a dielectric barrier to prevent shorting of the electrodes on electrical biasing of the EL device" (Tang et al.; Column 39, Lines 50-68). Hay et al. (US Patent 5,697,322) teaches that "A thick-film EL lamp is essentially a capacitor having a dielectric layer between two conductive electrodes, one of which is transparent" (Column 1, Lines 35-47).

Krafcik et al. teaches "Portions of conductive traces 36 that are not connection points to conductive pads 41a of lamps 40 are generally covered with a dielectric layer to provide electrical isolation, reduce silver migration, and to provide moisture protection" (Column 5, Lines 35-57). Since the applicant does not address the use or application of an insulating or dielectric layer in the original specification, it is unclear as to how or if the device could operate without one.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hay et al. (US Patent 5,697,322) teaches a thick-film EL lamp that is a dial plate and is essentially a capacitor having a dielectric layer between two conductive electrodes, Ozaki et al. (US Patent 6,621,471) teaches an EL lamp for a dial plate of an instrument panel, and Cok (US Patent 6,787,990) teaches an EL lamp with a substrate, first electrode, EL layer, and second electrode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Makiya whose telephone number is (571) 272-2273. The examiner can normally be reached on Monday-Friday 7:30am - 4:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJM 10/28/2007

JONG-SUK (JAMES) LEE
SUPERVISORY PATENT EXAMINER